

pending in the subject application are patentable over the prior art relied on by the Examiner. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

As is set forth in the specification and in the claims of the subject application, the invention is directed to a method for incorporating a fibriform smoke-modifying material into a smoking material rod. The fibriform material is provided as a pre-formed material having a degree of rigidity. It is set forth in the specification of the application, at page 7 thereof, that the fibriform smoke-modifying material has a degree of rigidity so that it will not be immediately displaced up against the suction band when it is provided as a single element. It is very clear from a reading of the specification that the fibriform material may be a single, continuous element (page 7, line 10) or as a sequence of discrete elements (page 7, line 13). The fibriform element is again recited, at page 6 line 18 as being a single, continuous element. As depicted in Fig. 1 of the drawings, the continuous fibriform element 13 is fed to the tobacco rod making machine, generally at 1, from a supply spool 14.

The specification of the application has been amended at several locations to add the term "pre-formed" in connection with the fibriform element. This has been done to provide antecedent basis for the use of this term in the amended claims as presented in this Amendment. It is believed that this term does not constitute any new matter and that its use in describing the structure of the fibriform element is well supported by the disclosure of the application.

The pre-formed fibriform material is fed along a path to the rod making machine where it is incorporated into the smoking material that has been accumulating on a moving suction belt. That material accumulation starts before the introduction of the fibriform material. As such, the fibriform material is incorporated into the smoking material rod generally at a central location in the rod.

In the of October 7, 2002, the Examiner has rejected claims 19-23, 25-27, 32-35, 37, 38 and 40-42 as being anticipated by the Haws reference EP 0 405 929 A2. Claims 19-27, 29-38 and 40-43 were also rejected as being obvious to one of skill in the art over Haws. Claim 28 was objected to as depending from a rejected base claim but was indicated as being allowable if put in independent form. Claim 38 was allowed.

Turning initially to the Examiner's response to the Amendment of August 21, 2002, the Examiner's assertion that the specification of the application does not define what constitute a fibriform element, and that the liquid strand of Haws is a fibriform material or element is respectfully but strenuously contested. It is very clear from a reading of the specification that the disclosed fibriform element or elements are something that has or have a degree of structural rigidity and that is a single continuous element or a sequence of discrete elements. The fibriform element or elements is or are conveyed to the point of entry to the rod machine by a feed means that may take the form of a pair of opposed rollers which are operable to "draw a fibriform element from a wound storage source" (page 10, line 18). As is also discussed at page 13 of the specification, and as is clearly depicted in Fig. 1 of the drawings, the fibriform

element is one that has a physical structure, that is carried on a spool, and that is pulled into the rod-making machine by first rollers. It clearly is not a liquid. The specification of the application defines what constitutes a fibriform material or element with sufficient specificity that one of skill in the art would readily appreciate that it is not a liquid.

This understanding of the meaning of the term fibriform is further supported by the copies of two dictionary references enclosed herewith. Both references are taken from reputable dictionaries of the English language published before the filing date of the application in suit. Fibriform is defined as "having the form of a fibre or fibres". Clearly a liquid strand **does not** constitute a fibriform element as defined by a dictionary i.e. normal English usage, and would be understood not to do by a person skilled in the art.

Turning now to the Examiner's rejection of claims 19-23, 26, 27, 32-35 and 40-42 as being anticipated by Haws, the following comments are believed to be appropriate. Dealing initially with the features common to all of the aforementioned claims, it is asserted that the rejection is not correct for the following reasons.

The prior art does not disclose a fibriform smoke modifying material or element as the ordinary meaning of "fibriform" does not include a liquid (see enclosed references). Furthermore, the fibriform element of the present invention is formed outside the rod-making machine and is sufficiently rigid and self-supporting to be fed to and through the machine with, or without, a guide. The prior art discloses the extrusion of a liquid strand within the rod-making machine, the extrusion occurring at,

or extremely close to, the suction band of the machine.

In addition, the fibriform material incorporated into a tobacco rod according to the method of the present invention is fed to and within the machine along a longitudinal feed path. The prior art, on the other hand, discloses a perpendicular extrusion pipe within the chimney (pipe 51), and a liquid strand that is only formed upon extrusion through nozzle 53.

Haws provides no identical teaching for every element of any of the independent claims of the present invention, and thus cannot anticipate these claims.

In addition to the foregoing arguments with respect of the novelty of the independent claims of the present invention, the following arguments in favor of the novelty of the invention can be applied.

Claim 19 does not require the presence of a guide for the fibriform material. The fibriform material is pre-formed before being fed into the rod-making machine, whereas the liquid strand of the Haws art is extruded *in situ*, necessitating a nozzle and a supply pipe as means for extruding the strand.

With regard to claim 26, the asserted “guide” of the Haws does not function as a guide in the sense that it is only required to constrain the material against a suction force and to more precisely locate the material in the tobacco rod. Instead the pipe and nozzle configuration shown in Haws is required to form the extruded liquid strand, therefore is not a “guide” at all.

In claim 38 of the present invention, the fibriform element is fed into the rod-making machine at a distance spaced from the suction band, whereas the prior art provides a contrary disclosure in which the liquid strand is initially placed on the tobacco when extruded.

Claim 40 is novel for the reasons given above for the features common in all of the independent claims, together with the reasons conferring novelty on claim 26 of the present invention.

Claim 41 provides for a streamlined fairing on the guide which feature is not disclosed at all in the prior art, nor is there a disclosure in Haws relating to the enlargement of the flow path of the particulate smoking material in a vicinity of the guide as provided for in claim 42 of the present invention. In addition, the arguments put forward in respect of claim 26 are equally applicable to claims 41 and 42 in the sense that the prior art does not disclose a guide, but instead discloses an extrusion pipe and nozzle through which a liquid strand is extruded *in situ*.

Turning now to the rejections of claims 19-27, 29-38 and 40-43 35 USC 103(a) that the claims are obvious over Haws, claim 19 cannot be obvious in light of Haws because there is no contemplation in the prior art of the incorporation of a fibriform smoke-modifying material into a tobacco rod. Clearly a liquid strand is **not** a fibriform material, and a person skilled in the art would not contemplate a fibriform material based on the teachings of Haws. Additionally, the present invention provides a method whereby a fibriform material is fed “longitudinally **to** said smoking material rod-making

machine" (emphasis added). The prior art only contemplates the formation of a liquid strand within the rod-making machine, the strand not being formed until exiting nozzle

53. There is no teaching in the prior art of feeding a pre-formed material to a rod-making machine, thus there is no teaching towards the present invention.

Furthermore, claim 19 requires no guide for incorporation of the fibriform material into the tobacco rod. The prior art Haws device requires the pipe and nozzle described in order that the liquid be placed onto the tobacco rod. In the absence of the pipe and nozzle, the prior art would not accomplish the required result i.e. the extrusion and incorporation of the liquid strand in a tobacco rod. In fact, without the pipe and nozzle, the liquid would simply contaminate the rod-making machine. Therefore, there is no teaching in Haws to suggest any other means of incorporating the liquid extrudate into the tobacco rod. One of skill in the art would not be led to the present invention, thus claim 19 and all claims depending therefrom are inventive over Haws.

In respect to claims 26-37, Haws only contemplates the extrusion of a liquid strand within a rod-making machine. There is no teaching of a fibriform material, nor is there any teaching for providing a material along a longitudinal feed path to and within a rod-making machine. The prior art clearly teaches a perpendicular feed path through the chimney of the machine, Figure 4 and Col. 4, lines 37-38 of Haws teach that the nozzle is configured so as to supply the liquid through the side of the guide rails. The contention that Figure 2 of Haws shows the nozzle 53 emitting the liquid strand material oriented longitudinally, is made without an appreciation of the differences between

Figures 2 and 4 of the reference. Figure 4 is intended to be a cross-sectional view of Figure 2 at 4-4, however, Figure 4 clearly shows that the nozzle appears through the guide rails i.e. perpendicular to the travel direction of the suction band of the machine.

The Examiner further contends that the pipe configuration is both perpendicular and horizontal to the travel path and such is of no importance. Col. 4, lines 38-39 of the Haws reference states that the pipe 51 travels through a 90° angle. This is also shown in Fig. 2. The "elbow" is necessary to orientate the nozzle to allow extrusion of the liquid strand into the tobacco rod on the suction band because the pipe travels through the chimney perpendicular to the suction band. The configuration taught in the prior art would be inappropriate in the present invention which is directed to the use of a sufficiently rigid, self-supporting fibriform material.

For the foregoing reasons it is believed that claims 26-37 are also allowable over Haws. In particular, claim 34 provides a streamlined fairing on the guide of which there is no teaching or contemplation in the prior art, nor is claim 35 taught or contemplated in Haws for the reasons discussed above.

The arguments presented with respect to claims 19 and 26 regarding the fibriform material and the feed path of the material apply equally to claim 38. In addition, claim 38 requires "entering said fibriform element into said smoking material rod-making machine at a distance spaced from said suction band" (emphasis added). The teaching of the prior art entirely contradicts this disclosure as the liquid strand of Haws is formed by extruding a liquid through a nozzle and placing it on

tobacco on a suction band. If the nozzle were to be spaced from the suction band, the liquid would contaminate the rod-making machine. The assertion that the constraining distance is an obvious matter of apparatus design choice is not correct because any spacing of the nozzle from the tobacco and the suction in the prior art would not be contemplated as this would adversely affect the resulting product. In the absence of the asserted guide i.e. the pipe and nozzle, the liquid would undoubtedly contaminate the machine and, in addition, the formation of the liquid strand would be impossible as the means for extruding the strand would be absent. The prior art teaches away from the solution provided by claim 38 and thus cannot render the claim obvious.

Claims 40-43 are believed to be allowable over Haws for the reasons given above.

For the above reasons, it is believed that the claims now pending are neither anticipated by, or rendered obvious in view of the Haws reference cited and relied on by the Examiner. The other references of record, but not relied on by the Examiner in the rejections of the claims, have again been reviewed. Since they were not relied on, no discussion thereof is required.

SUMMARY

Several paragraphs of the specification of the application have been amended to provide antecedent basis for a newly presented claim term. These changes do not constitute new matter.

Claims 19, 20, 24-28, 32, 38 and 40-43 have been amended. Claims 21-23, 29-31, 33-37 and 39 have been carried forward. It is believed that all of the claims now pending in the subject patent application are patentable over the prior art cited and relied on by the Examiner. Allowance of the claims, and passage of the application to issue is respectfully requested.

Respectfully submitted,

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MARKED-UP COPY OF REPLACEMENT PARAGRAPHS

OLIVER - 09/762,532

The fibriform smoke-modifying material suitably takes the form of a single, continuous, pre-formed fibriform element. Alternatively, in respect of the second aspect of the present invention the fibriform smoke-modifying material could be fed to and into contact with the particulate smoking material in the form of a sequence of discrete pre-formed fibriform elements. In the latter case each element, in the feed path of the elements, may be at each end thereof in contact with the respective ends of the next adjacent elements of the sequence thereof, or may be spaced therefrom.

In Figures 1 and 3 respectively reference numerals 9 and 10 designate generally feed means operable to feed pre-formed continuous[ly] fibriform element 13 to the making machine, which feed means 9, 10 comprise a pair of opposed feed rollers 11, 12. The feed roller 12 is a spring-loaded, non-driven roller, which roller applies a force to the element 13 without deforming the element 13. The feed roller 11 is driven by a servo motor (not shown). Feed rollers 11 and 12 draw the pre-formed continuous fibriform element 13 from a spool 14 upon which spool 14 the continuous element 13 is wound.

MARKED-UP COPY OF AMENDED CLAIMS
19, 20, 24-28, 32, 38, AND 40-43

OLIVER - 09/762,532

19. (Twice Amended) A method of incorporating fibriform smoke-modifying material in a smoking material rod, the method, comprising:

providing a smoking material rod-making machine;

including a suction band in said smoking material rod making machine, said suction band having a travel direction, said suction band [and] forming a smoking material deposition run having a start and an end;

applying a suction force to said suction band;

depositing particulate smoking material on said suction band along said smoking material deposition run between said start and said end of said smoking material deposition run;

providing a pre-formed fibriform smoke-modifying material having a degree of rigidity;

providing [feeding fibriform smoke-modifying material longitudinally to said smoking material rod-making machine along] a longitudinal feed path for said pre-formed fibriform smoke-modifying material to follow in said smoking material rod-making machine, said longitudinal feed path being in said travel direction of said smoking material deposition run of said suction band of said smoking material rod-making machine;

feeding said pre-formed fibriform smoke-modifying material to said longitudinal feed path;

causing said longitudinal feed path to be followed by said pre-formed [of said] fibriform smoke-modifying material to start ascending [ascend] toward said suction band, under the influence of said suction force, at a distance along said smoking material deposition run intermediate said start and end of said smoking material deposition run;

supporting said pre-formed fibriform material and maintaining said pre-formed fibriform material at a position spaced from said suction band by said particulate smoking material deposited on said suction band before, in said travel direction, said ascending [ascent] of said longitudinal feed path; and

depositing additional particulate smoking material on said suction band along said smoking material deposition run after, in said travel direction, said start of said ascending [ascent] of said longitudinal feed path.

20. (Twice Amended) The method according to claim 19 further including providing said pre-formed fibriform smoke-modifying material in the form of a single, continuous, fibriform element.

24. (Twice Amended) The method according to claim 19 further including causing said feed path of said pre-formed fibriform smoke-modifying material to be ascending [ascend] at an angle and controlling said angle of said ascending [ascent] of said feed path of said pre-formed fibriform smoke-modifying material so that said angle of said ascending of said feed path [ascent] is not more than about 5 degrees from horizontal.

25. (Twice Amended) The method according to claim 19 further including feeding said pre-formed fibriform smoke-modifying material to said smoking material rod-making machine at a fixed speed in relation to a speed at which said smoking material rod-making machine is run.

26. (Twice Amended) A method of incorporating fibriform smoke-modifying material in a smoking rod material, said method comprising:

providing a smoking material rod-making machine;
including a suction band in said smoking material rod-making machine, said suction band having a travel direction and forming a smoking material deposition run having a start and an end;

applying a suction force to said suction band;
depositing particulate smoking material on said suction band along said smoking material deposition run between said start and said end of said smoking material deposition run;

providing a pre-formed fibriform smoke-modifying material having a degree of rigidity;

providing [feeding a fibriform smoke-modifying material to said smoking material rod-making machine along] a longitudinal feed path for said pre-formed fibriform smoke-modifying material to follow in said smoking material rod-making machine, said longitudinal feed path in said smoking material rod-making machine extending in said travel direction of said smoking material deposition run of said

suction band of said smoking material rod-making machine;

providing a [fibriform smoke-modifying material] guide in said smoking material rod-making machine;

feeding said pre-formed fibriform smoke-modifying material to said guide;

constraining said pre-formed fibriform smoke-modifying material by said guide in said smoking material rod-making machine to follow said longitudinal feed path spaced from said suction band and to be constrained against movement in response to said suction force toward said suction band until a distance along said smoking material deposition run intermediate said start and said end of said smoking material deposition run, said pre-formed fibriform material being supported and maintained at a position spaced from said suction band by particulate smoking material deposited on said suction band before, in said travel direction, and by said guide; and

depositing additional particulate smoking material on said suction belt along said smoking material deposition run after, in said travel direction, said guide.

27. (Twice Amended) The method according to claim 26 further including providing said pre-formed fibriform smoke-modifying material as a single, continuous, fibriform element.

28. (Twice Amended) The method according to claim 26 further including feeding said pre-formed fibriform smoke-modifying material to and into contact with said particulate smoking material as a sequence of discrete pre-formed fibriform elements.

32. (Twice Amended) The method according to claim 26 further including feeding said pre-formed fibriform material along said longitudinal feed path which extends beneath said smoking material deposition run at a constant vertical distance from said suction band.

38. (Twice Amended) A method for incorporating a fibriform element in a smoking material rod, said method comprising:

providing a smoking material rod making machine having a moving suction band having a start and an end;

exerting a suction force [for supporting and transporting particulate smoking material deposited] on said moving suction band;

using said suction force exerted on said moving suction band for supporting and transporting particulate smoking material deposited on said moving suction band;

feeding a pre-formed fibriform element to said smoking material rod making machine along a longitudinal feed path, said longitudinal feed path being generally parallel to a direction of travel of said moving suction band in said smoking material rod making machine;

entering said pre-formed fibriform element [[enters]] into said smoking material rod making machine along said longitudinal feed path at a distance spaced from said moving suction band;

causing said pre-formed fibriform element to ascend toward said moving

suction band due to said suction force at a location intermediate said start and said end of said moving suction band, said pre-formed fibriform element contacting a layer of said particulate smoking material [already] deposited on said moving suction band before said intermediate location; and

depositing additional smoking material on said moving suction band and on said pre-formed fibriform element subsequent to said intermediate location and subsequent to said entering of said pre-formed fibriform element into said smoking material rod machine.

40. (Amended) A method of incorporating fibriform smoke-modifying material in smoking rod material, said method comprising:

feeding longitudinally a pre-formed fibriform smoke-modifying material having a degree of rigidity to a rod making machine along a feed path, [wherein] said feed path in said machine extending [extends] in a travel direction of a smoking material deposition run of a suction band of said machine and [wherein] said feed path in said machine ascending [ascends] toward said smoking material deposition run;

providing a guide for said pre-formed fibriform smoke-modifying material in said rod making machine;

constraining said pre-formed fibriform material by using said [a] guide in said machine so that said pre-formed fibriform material follows said feed path spaced from said run of said suction band and is constrained against a suction force exerted by said suction band and directed toward said run until at a distance along said deposition

run said pre-formed fibriform material becomes supported and is subsequently maintained at a position spaced from said run by a particulate smoking material deposited on said run; and

depositing additional smoking material on said run subsequent to said distance as which said pre-formed fibriform material is supported by a particulate smoking material deposited on said run.

41. (New) A method of incorporating fibriform smoke-modifying material in smoking rod material, said method comprising;

feeding longitudinally a pre-formed fibriform smoke-modifying material having a degree of rigidity to a rod making machine along a feed path, [wherein] said feed path in said machine extending [extends] in a travel direction of a smoking material deposition run of a suction band of said machine;

providing a guide for said pre-formed fibriform smoke-modifying material in said rod making machine;

constraining said pre-formed fibriform material by using said [a] guide in said machine so that said pre-formed fibriform material follows said feed path spaced from said run of said suction band and is constrained against a suction force exerted by said suction band and directed toward said run until at a distance along said deposition run said pre-formed fibriform material becomes supported and is subsequently maintained at a position spaced from said run by a particulate smoking material deposited on said run;

providing a streamlined fairing on said guide; and
depositing additional smoking material on said run.

42. (Amended) A method of incorporating fibriform smoke-modifying material in smoking rod material, said method comprising;

feeding longitudinally a pre-formed fibriform smoke-modifying material having a degree of rigidity to a rod making machine along a feed path, [wherein] said feed path in said machine extending [extends] in a travel direction of a smoking material deposition run of a suction band of said machine;

providing a guide for said pre-formed fibriform smoke-modifying material in said rod making machine;

constraining said pre-formed fibriform material by using said [a] guide in said machine so that said pre-formed fibriform material follows said feed path spaced from said run of said suction band and is constrained against a suction force exerted by said suction band and directed toward said run until at a distance along said deposition run said pre-formed fibriform material becomes supported and is subsequently maintained at a position spaced from said run by a particulate smoking material having a flow path and being deposited on said run;

enlarging said flow path of said particulate smoking material in a vicinity of said guide; and

depositing additional smoking material on said run.

43. (Amended) A method of incorporating fibriform smoke-modifying material in smoking rod material, said method comprising:

feeding longitudinally a pre-formed fibriform smoke-modifying material having a degree of rigidity to a rod making machine along a feed path, [wherein] said feed path in said machine extending [extends] in a travel direction of a smoking material deposition run of a suction band of said machine, said suction band being provided with a suction force;

providing a guide for said pre-formed fibriform smoke-modifying material in said rod making machine;

constraining said pre-formed fibriform material by using said [a] guide in said machine so that said pre-formed fibriform material follows said feed path spaced from said run of said suction band and is constrained against said suction force toward said run until at a distance along said deposition run said pre-formed fibriform material becomes supported and is subsequently maintained at a position spaced from said run by a particulate smoking material deposited on said run;

varying said suction force at said portion of said smoking material deposition run adjacent said guide relative to said suction force over a remainder of said smoking material deposition run; and

depositing additional smoking material on said run.